



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/688,911

10/21/2003

Tac-jung Yoon

1349.1301

3775

21171 7590 07/20/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

DICKERSON, CHAD S

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

07/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/688,911	Applicant(s) YOON, TAE-JUNG	
	Examiner Chad Dickerson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 8 and 9 is objected to because of the following informalities:
 - Re claim 8: On the last line of claim 8, the word "devise" should be changed to -- device --. Claim 9 is also objected because of the dependency on the objected claim 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukamoto '033 (US Pub No 2002/0048033).

Re claim 1: Tsukamoto '033 discloses a data processing apparatus operable in accordance with a connected IC card, comprising:

at least one card slot receiving a data card having an image data and/or a specific execution file stored therein and an interface card for data communication with an external apparatus (i.e. an interface portion (120) has two card slots (121 and 122) to enable two communication cards to be connected. In Tsukamoto '033, an additional function card (1602) adds a function to the facsimile apparatus. The program IC card (1603) is used for storing a program and data for using the function from the additional

Art Unit: 2625

function card. The program IC card (1603) is considered to function as the data card since the program IC card (1603) has both data and a program, similar to a specific execution file, that needs to be executed in order to realize a certain function in the facsimile apparatus of Tsukamoto '033. Also, an interface card (1303) is used for establishing the connection with an external personal computer (1302); see figs. 1, 26-28, 31-40; paragraphs [0044]-[0046], [0143]-[0165]);

a detection unit detecting whether a memory card installed in the card slot is the data card or the interface card (i.e. the system of Tsukamoto '033, the card slot driver software (1728 and 1730) is operated to correspond with a variety of cards in the card slots in order to detect the type of card in the card slots. With the system of Tsukamoto '033 using both interface cards and cards that store programs, analogous to a specific execution file, with data, it is clearly shown in figures 41 and 42, with a reference to paragraph [0176], that the feature of detecting which specific card is in the card slot is performed; see figs. 26-28, 31-42; paragraphs [0166]-[0185]); and

a control unit determining whether to execute the interface card, if the interface card is installed in the card slot according to the detection unit, and communicating with the external apparatus according to the executing interface card (i.e. in the system of Tsukamoto '033, the CPU (101) goes through the process checking to see what type of card is in the card slots, then it also checks to see if the card should be executed, based on corresponding software present in the body that will allow the functionality of the software on the card in the slot. If the card in the slot matches up with the software in the body, the function of the card can be performed. For example, if the card in the slot

Art Unit: 2625

relates to an interface card, such as an interface card mentioned in paragraph [0143], then once the system recognizes that the software on the card does not contradict the software in the body, the communication between the body and the personal computer can be performed using the software that is on the interface card. This same example is for the modem used in the system as well; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 2: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, further comprising:

a storage unit storing more than one device driver corresponding to an installed interface card (i.e. the ROM (102), considered as the storage unit, supplies driver software (1728 and 1730) that correspond to the variety of cards that are placed in the card slots (121 and 122). These cards can include interface cards, modem, LAN cards or simple memory cards; see figs. 26-28, 31-42; paragraphs [0141]-[0187]),

wherein if the interface card is installed in the card slot according to the detecting unit, the control unit determines whether a device driver corresponding to the installed interface card is stored in the storage unit to execute the interface card, and if the control unit determines that a device driver corresponding to the installed interface card is not stored in the storage unit, the control unit outputs a message that the interface card cannot be executed (i.e. In Tsukamoto '033, the interface card or other cards in the card slots (121 and 122) are first checked to see what type of cards reside in the card slots. Next, it is determined if the information on the card needs to be transferred to the

Art Unit: 2625

body (1301). Then the determination is made to see if the program and data, considered as the device driver, in the body corresponds with the program and data of the set card in the card slots (121 or 122). If the determination is made that the software of the body and the set card contradict one another, an error takes place and a message is provided to the user letting the user know that the card needs to be changed in order to overcome the error or contradiction and for the actual software on the card to operate in the system. The error message alerting the user that the card needs to be change because of the contradiction of software is analogous to outputting a message that the interface card cannot be executed; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 3: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, further comprising:

another card slot receiving the data card storing the device driver corresponding to the installed interface card, if the device driver corresponding to the installed interface card is not stored in the storage unit (i.e. In Tsukamoto '033, there are two card slots. Each card slot can be used to install a program, considered as a device driver, if necessary. When the process of determining if a card's data should be transferred to the body takes place, this is an example of transferring the program information over to the body if the data or program needed is not present. When the system urges the user to change the card in order to get the correct program, or software, for the operation, the user can replace the card with another card and the process of figure 40 starts back

Art Unit: 2625

at step 1401, where the card type is determined and checking to see if the program needs to be added that corresponds to the software of the card in the card slots (121 and 122); see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 4: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, wherein if the control unit determines that the device driver corresponding to the installed interface card is not stored in the storage unit, the control unit generates a message requesting installation in the card slot of the data card storing the device driver corresponding to the installed interface card (i.e. in Tsukamoto '033, when the system recognizes that the program, analogous to the device driver, corresponding to the card in the card slot is not in the ROM (102) in the body, the system urges the user to change to another card, or install another card in the card slot, in order to obtain the appropriate program for the card installed in order to perform the desired action with the card. This card may correspond to an interface card or some other card, such as the additional function card. In order to perform a function on the body, the software must be on the body and that software has to match the software on the card. In order to use the interface card, the interface card must be installed as well as the program IC card (1304) in the body in order for the communication to the personal computer to be achieved. The process of figures 41 and 42 can be applied to this case if a correct interface card is installed, but a wrong program IC card, considered as the data card, is installed. In this case, the card used in a specific slot that might

need to be changed in order to realize the function is urged to the user; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 5: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, wherein if the data card is installed in the card slot according to the detection unit, the control unit determines whether a specific execution file exists from among files stored in the data card, and executes a specific function by executing the specific execution file, if the specific execution file is stored in the memory card (i.e. the additional function card (1602), considered as the interface card in this example, is used to introduce new functions to the facsimile apparatus. The program IC card, (1603) stores a program and data used to realize the additional function from the additional function card (1602). In the system, both cards may be detected. The system determines the specific program, analogous to the specific execution file, that exist in the program IC card (1603) that may be among other types of programs or data, and executes this specific program relating to the additional function stored on the program IC card (1603). The additional function card (1602) may be present in the card slot along with the program IC card (1603), but the additional function cannot be realized without the program used to perform the additional function. Therefore, when the system recognizes the additional function desired to be operated, the program IC card (1603) in the system is queried to see if the function is available on the card and if the program is available, then the execution of the program is performed; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 6: Tsukamoto '033 discloses a data processing apparatus operable in accordance with a connected IC card, the control method comprising:

detecting whether a memory card installed in the card slot is the data card or the interface card (i.e. the system of Tsukamoto '033, the card slot driver software (1728 and 1730) is operated to correspond with a variety of cards in the card slots in order to detect the type of card in the card slots. With the system of Tsukamoto '033 using both interface cards and cards that store programs, analogous to a specific execution file, with data, it is clearly shown in figures 41 and 42, with a reference to paragraph [0176], that the feature of detecting which specific card is in the card slot is performed; see figs. 26-28, 31-42; paragraphs [0166]-[0185]); and

upon determining that the interface card is installed in the card slot, executing the interface card and controlling data communication with the external apparatus according to the executing interface card (i.e. in the system of Tsukamoto '033, the CPU (101) goes through the process checking to see what type of card is in the card slots, then it also checks to see if the card should be executed, based on corresponding software present in the body that will allow the functionality of the software on the card in the slot. If the card in the slot matches up with the software in the body, the function of the card can be performed. For example, if the card in the slot relates to an interface card, such as an interface card mentioned in paragraph [0143], then once the system recognizes that the software on the card does not contradict the software in the body, the communication between the body and the personal computer can be performed using

Art Unit: 2625

the software that is on the interface card. This same example is for the modem used in the system as well; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 7: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the method, wherein the interface card executing comprises determining whether the installed interface card is executable by determining whether there is a device driver corresponding to the interface card stored in the storage unit (i.e. In Tsukamoto '033, the interface card or other cards in the card slots (121 and 122) are first checked to see what type of cards reside in the card slots. Next, it is determined if the information on the card needs to be transferred to the body (1301).

Then the determination is made to see if the program and data, considered as the device driver, in the body corresponds with the program and data of the set card in the card slots (121 or 122). If the determination is made that the software of the body and the set card contradict one another, an error takes place and a message is provided to the user letting the user know that the card needs to be changed in order to overcome the error or contradiction and for the actual software on the card to operate in the system. The error message alerting the user that the card needs to be change because of the contradiction of software is analogous to outputting a message that the interface card cannot be executed; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 8: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the method, wherein the determining whether the device driver corresponding to the installed interface card is stored in the storage unit comprises generating a message requesting installation of the data card storing the device driver corresponding to the installed interface card, if the device driver is not stored in the storage unit (i.e. in Tsukamoto '033, when the system recognizes that the program, analogous to the device driver, corresponding to the card in the card slot is not in the ROM (102) in the body, the system urges the user to change to another card, or install another card in the card slot, in order to obtain the appropriate program for the card installed in order to perform the desired action with the card. This card may correspond to an interface card or some other card, such as the additional function card. In order to perform a function on the body, the software must be on the body and that software has to match the software on the card. In order to use the interface card, the interface card must be installed as well as the program IC card (1304) in the body in order for the communication to the personal computer to be achieved. The process of figures 41 and 42 can be applied to this case if a correct interface card is installed, but a wrong program IC card, considered as the data card, is installed. In this case, the card used in a specific slot that might need to be changed in order to realize the function is urged to the user; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 9: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the method, wherein the interface card executing comprises executing the device driver stored in the requested installed data card to execute the

Art Unit: 2625

interface card (i.e. when the card set in the card slots has been used to supply the software, analogous to the device driver, corresponding to the card, the operation using the set card is performed as long as the software on the body matches, or does not contradict, the software on the card set in the card slots; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 10: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the method, wherein the determining whether the device driver corresponding to the installed interface card is stored in the storage unit further comprises determining whether a specific execution file exists from among files stored in the data card, and if determined that the specific execution file exists in the data card, executing the specific execution file to execute the interface card (i.e. the additional function card (1602), considered as the interface card in this example, is used to introduce new functions to the facsimile apparatus. The program IC card, (1603) stores a program and data used to realize the additional function from the additional function card (1602). In the system, both cards may be detected. The system determines the specific program, analogous to the specific execution file, that exist in the program IC card (1603) that may be among other types of programs or data, and executes this specific program relating to the additional function stored on the program IC card (1603). The additional function card (1602) may be present in the card slot along with the program IC card (1603), but the additional function cannot be realized without the program used to perform the additional function. Therefore, when the system

Art Unit: 2625

recognizes the additional function desired to be operated, the program IC card (1603) in the system is queried to see if the function is available on the card and if the program is available, then the execution of the program is performed; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 11: Tsukamoto '033 discloses a data processing apparatus operable in accordance with a connected IC card, comprising:

a card slot receiving a memory card (i.e. there are a plurality of card slots (121 and 122) in Tsukamoto '033 that are able to receive memory cards in the system; see figs. 26-28, 31-42; paragraphs [0172]); and

a programmed computer processor detecting whether the received memory card is a function extension type card (i.e. in Tsukamoto '033, the system can detect if a additional function card, analogous to an function extension card, since the system detects what types of cards are in the card slots. The determination of what types of cards are in the cards slots is illustrated in figure 41; see figs. 26-28, 31-42; paragraphs [0141]-[0187]), and

executing the function extension type card to communicate with an external apparatus having a compatible communication interface with a communication interface stored in the extension type card (i.e. the additional function card (1602) can be a new center facsimile function for performing communication with a multiplicity of facsimile devices in the system that have compatible communication interfaces. The program IC card (1603) is used as the program and data to realize the functionality of the additional

function card. The newly acquired function can be stored in the additional function card (1602) to be utilized by the facsimile device in the system by using the program IC card (1603) associated with the additional function card (1602); see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 12: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, wherein the programmed computer processor further executes the function extension type card to execute new printer functions (i.e. the program IC card (1603) can be used to introduce new features or functions to the facsimile device that has a printer in the apparatus. The additional function card (1602) introduces new features that the CPU (101) of the facsimile device that could not be performed unless the card was introduced to the system, but the program IC card (1603) has the data and program used to realize that new function. The facsimile device is considered as a printing device since the printing function can be performed; see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Re claim 13: The teachings of Tsukamoto '033 are disclosed above.

Tsukamoto '033 discloses the printer, wherein the received function extension type card stores a plug-in program as a device driver (i.e. the program IC card (1603) associated with the additional function card (1602) stores a program, analogous to a plug-in program, that functions as a device driver in the system to execute the additional function on the facsimile device; see figs. 26-28, 31-42; paragraphs [0141]-[0187]); and

the programmed computer processor executes the plug-in program to execute the function extension type card (i.e. the CPU (101) of the body executes the program of the program IC card (1603) in order to execute the type of additional function introduced by the additional function card (1602); see figs. 26-28, 31-42; paragraphs [0141]-[0187]).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Suzuki '288 (US Pat No 5027288) discloses systems in which a recording apparatus can have various recording functions altered and add various other functions using a portable storage means such as an IC card.
6. Murata '067 (US Pat No 6330067) discloses a digital copying machine that has a card slot that is able to determine if a card is present in the card slot and the type of information present on the card to be download onto the copying machine and processed in the digital device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/ *CD*
Chad Dickerson
July 13, 2007

A. L. E.
AUNG S. MOE
SUPERVISORY PATENT EXAMINER
7/17/07